Flood News for Michigan Floodplain Managers

A quarterly newsletter of the
Geological and Land Management Division
Michigan Department of Environmental Quality
www.michigan.gov/deq
Steven E. Chester, Director Jennifer M. Granholm, Governor Spring 2003

Greetings Floodplain Managers;

I've been asked to provide some information on my background coming into my reassignment to the State of Michigan National Flood Insurance Program (NFIP) coordinator. The position became vacant upon the retirement of Mr. George Hosek, whom many of you have known for a long time as "Mr. NFIP" for the State, and also as a regionally and nationally recognized leader and spokesperson for the program.

George's retirement leaves a tremendous void which I will not pretend that I can fill to the full extent that he did or with the depth of dedication that he had and continues to have for the program. George's influence will still exist. He has graciously offered to be available for guidance and answers to many questions I have had and will continue to have as I progress through the early learning phases of what the NFIP and floodplain management is all about. George is staying involved in floodplain management through other avenues and activities.

This year is my 25th year of employment with the State of Michigan. I have been involved with the land/water interface regulatory programs since 1985. Prior to that, I was involved in the National Pollution Discharge Elimination System (NPDES) wastewater discharge and state groundwater discharge permitting program. The majority of my years involving the land/water interface regulations were in the Permit Consolidation Unit, where I initially worked with staff in processing over 6,000 permit applications annually and eventually took on an oversight and supervisory role for the statewide permit consolidation review process. Recent job assignments were administering the new Great Lakes Submerged Log Recovery permitting program and assisting in the administration of the inland lake and stream marina operating permit program.

My educational background includes a BS in Fisheries and Wildlife Biology, a secondary teaching certification, and post-graduate coursework in biological science, all from Michigan State University. Prior to State employment, I taught junior high science and high school biology and experienced factory employment. I was raised on a dairy farm and continue to maintain a portion of the family farm under cultivation. My wife and I have four children; two are in college and two are through college.

I end with a commitment that I will do my best in carrying out the expected duties, tasks, and responsibilities associated with the NFIP coordinator position. It is quite obvious to me that there is a lot to learn, understand, and know about how the many facets of the NFIP and overall flood management interrelate and function together—an interesting challenge.

Thank you,
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UPDATED FEMA MT-EZ, MT-1, AND MT-2 APPLICATION FORMS
(Susan Rundhaug, Geological and Land Management Division, Michigan Department of Environmental Quality)

Last fall FEMA updated their MT-EZ, MT-1, and MT-2 application forms. Such forms are used for the purpose of requesting the Federal Emergency Management Agency (FEMA) to remove existing Special Flood Hazard Area (SFHA) designations from structures or properties. A SFHA designation indicates that an area would be inundated by the flood having a 1 % annual chance of being equaled or exceeded in any given year (base flood). The basses of support for such requests are either the properties were originally considered within SFHAs and further information has shown that they are not, or, filling has occurred that has resulted in the properties now being above the base flood elevation.

The updated MT-EZ, MT-1, and MT-2 application packages were designed to assist requesters (community officials, individual property owners, and others) in gathering the information FEMA needs to determine whether property (parcel(s) of land or structure(s)) is likely to be flooded during the flood event that has a 1 percent chance of being equaled or exceeded in any given year (base flood).

The MT-EZ form should be used by an individual property owner to request that FEMA remove a single structure or a legally recorded parcel of land, or portion thereof, from a designated Special Flood Hazard Area. This is accomplished via a Letter of Map Amendment (LOMA). This form cannot be used to remove a parcel of land that has been filled.

The forms in the MT-1 package shall be used to request Letters of Map Amendment (LOMAs), Conditional Letters of Map Amendment (CLOMAs), Letters of Map Revision Based on Fill (LOMR-Fs), and Conditional Letters of Map Revision Based on Fill (CLOMR-Fs).

The forms in the MT-2 package shall be used to request Conditional Letters of Map Revision (CLOMRs) and Letters of Map Revision (LOMRs). To obtain the various forms, you may access them at http://www.fema.gov/nfip/forms and select the forms you need to use from the Forms Room Listing.

The fee schedule for processing certain types of requests for changes to National Flood Insurance Program (NFIP) maps has also been revised to allow FEMA to further reduce the expenses to the NFIP by more fully recovering the costs associated with processing conditional and final map change requests. The revised fee schedule for map changes is effective for all requests dated September 1, 2002 or later. It supersedes the current fee schedule, which was established on June 1, 2000. For additional information regarding fees, refer to the FEMA web site at http://www.fema.gov/fhm/frm_fees.shtm. If there are questions on the map change process, FEMA has a toll-free number to call, 1-877-336-2627.

16th ANNUAL CONFERENCE OF THE MICHIGAN STORMWATER-FLOODPLAIN ASSOCIATION
(Roger Clark, Geological and Land Management Division, Michigan Department of Environmental Quality)

This year's conference was held on April 8, 2003 at the Holiday Inn West in Lansing, with 83 in attendance. The conference was opened by Chairperson Tracy Slintak from the City of Farmington Hills, with a welcome to all attendees and an overview of the day to come. She was followed by Mark Walton of the National Weather Service with a demonstration of GIS capabilities for mapping predicted flood inundations. The GIS subject continued with Gary Mekjian and Jeff Davis of West Bloomfield Township demonstrating how their community uses GIS for floodplain and stormwater management. A panel discussion on current floodplain mapping initiatives came next. The panel consisted of Ken Hinterlong from FEMA - Region V, Joe Wanielista with the USACE, and Richard Sorrell of the Michigan Department of Environmental Quality (MDEQ).

Part of the annual conference included the Association's annual business meeting. Included in the agenda was the Board's announcement that a $2,000 scholarship is being awarded to the University of Michigan. It is to be granted by the University and spread over a two-year period to an undergraduate or graduate student studying in the stormwater-floodplain venue.

On another agenda item, there was considerable discussion regarding the future direction of the

Association and the benefit of establishing a part-time Executive Director position for the Association. There was an expression of general support for the concept, and a motion was made and supported to hire George Hosek to create a proposed work plan and job description for the Executive Director concept. George is recently retired from the MDEQ, where he served as the statewide specialist for the State Flood Hazard Community Assistance Program and the state coordinator for the Federal Emergency Management Agency's (FEMA) National Flood Insurance Program (NFIP). George is also a former chairperson of the National Association of State Floodplain Managers. This planning effort by George is to be funded from the Michigan Association's existing funds and is not to exceed $5,000.

Election of Association officers during the meeting resulted in the following: Tracy Slintak from the City of Farmington Hills was returned as chairperson. Mark Walton from the National Weather Service was elected as vice chair. Roger Clark of MDEQ was returned as treasurer, and Bob Haneline from Rowe Engineering was elected secretary.

The afternoon program consisted of two breakout sessions. One entitled *Floodplains 101* was presented by Joy Brooks of MDEQ. This session offered the attendees one continuing education credit. The other session continued with a discussion of the NFIP Community Rating System by Mike Knox. This was Mike's introduction to the Association as the new representative for Michigan from the Insurance Services Office. Mike was followed by Dave Drullinger from MDEQ discussing the new Stormwater Phase II, NPDES Permits; and a discussion from Annette DeMaria of Environmental Consulting and Technology on where to start after you get your NPDES permit. Norb Schwartz, Director of the Federal Insurance & Mitigation Division for FEMA's Region V, came next with floodplain management's priority in the new FEMA under the umbrella of Homeland Security. The conference was concluded with a presentation by Mike Sobocinski of the Michigan State Police Emergency Management Division regarding Your Community and Its Hazard Mitigation Plan.

Subsequent to the conference, the Board reviewed the feedback comments from the attendees and is starting to plan for next year's program. Several constructive comments were submitted and are certainly appreciated by the Board, as their goal is to develop and provide a conference to best meet the attendees' needs. Further survey questionnaires may be made by the Association's Board to help with planning next year's program. Look for such future surveys on the Association's web site of www.MIFloods.org or through other possible mailings to Association members.

POST OBSERVATIONS OF THE SPRING 2002 FLOODING IN MICHIGAN'S UPPER PENINSULA

(Sheila Meier, Geological and Land Management Division, Michigan Department of Environmental Quality)

It is hard to believe that an entire year has passed since citizens of central and western Upper Peninsula (U.P.) experienced the sudden, unexpected, and damaging spring flooding situation that occurred in April 2002. What is more difficult to believe is that I and other Michigan Department of Environmental Quality (MDEQ) staff are still involved, one year later, in the preliminary planning and design and processing of permit applications for the replacement and repair of roadway structures that were washed out during that flood. Some of us did not anticipate the challenges that would be associated with the community efforts to address immediate transportation needs, develop alternate routes, conduct damage evaluations, plan and design for structure replacements and repairs, and comply with the State's permitting process. However, we are progressing forward and estimate that we may be about 60% finished with the permitting actions for structure replacements and repairs.

The flooding that occurred in the central and western U.P. in mid-April 2002 was due to a combination of events that could occur in any year. It was not that unique. The winter was snowy, and over 100 inches of snow fell in February and March. The National Weather Service estimated that the snow pack held over 11 inches of water in early April. Two inches of rain fell on the snow between April 10 and 12. Temperatures soared in the 70s and 80s on April 15 and 16. The snow melted in a hurry. Snow cover went from several feet to green grass in literally a day. Observers could see a foot of water flowing over the fields towards the creeks and rivers.

Gogebic County was the hardest hit by the flooding. Over 160 homes and businesses in the City of Wakefield alone were damaged by flooding from lakes and streams. Areas adjacent to Sunday Lake that had never been flooded had several feet of water on them. The State Police Post was threatened, and the bridges

between Michigan and Wisconsin were closed. It was estimated that Gogebic County had $18 million dollars of damage.

After the Federal Emergency Management Agency (FEMA) declared the western U.P. a federal disaster area, it was anticipated that projects could be fixed quickly. Unfortunately, the process has not been quite as smooth and expedient as may have been hoped for and expected. Getting damaged structures replaced or repaired so they are fully upgraded to minimize future flooding impacts has proven to be more difficult than anticipated by many.

Many of the crossings that washed out a year ago are still not repaired. The length of time that it is taking to replace structures has been due to various reasons. Initially, time allocations involving immediate post flooding emergency management needs took priority. Then time allocations for damage evaluations and planning for project priority, budgeting, and preliminary designs for replacement and repair were necessary. Finally, the State's overall regulatory review process has taken time, including efforts in having the communities submit timely and complete permit applications.

The budgeting aspect for the communities is one that is proving to play a very important and potentially critical role in the final outcome of how and when some structures get replaced or repaired. Because the communities must obtain state permits for any proposed replacement or repairs to the damaged roadway crossing, they are faced with having to comply with applicable codes and standards that the State is statutorily required to impose upon the community for any specific project. For projects falling under the jurisdiction of the state floodplain regulations, the State uses a statutorily required floodplain management standard of "no harmful interference". The Floodplain Regulatory Authority found in Part 31, Water Resources Protection of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, defines "harmful interference" as causing an increased stage or change in direction of flow of a stream that causes, or is likely to cause, damage to property, a threat to life or of personal injury, pollution, impairment, or destruction of water or other natural resources. Harmful interference is not a number that you can pull out of the statute and use to easily design a proposed structure.

The State's review process evaluates each project on its own merits and site specific environmental and physical conditions. These required evaluations are finding that in a few cases the State cannot authorize the community to fix a damaged structure by simply putting things back the way they were before the flood. To do so would be assuring the occurrence of a future failure when similar flood flows are realized again. The intent of good responsible floodplain management is to take actions that will prevent or minimize damages, failures, and adverse impacts. The only options that will avoid or minimize damages, failures, and adverse impacts, and, are permitable, are proving to be more costly than what the community budgets can afford. Getting all involved parties at all levels to understand and accept this view of floodplain management has been a challenge.

The immediate response was to turn to the FEMA for funds to assist the communities in paying for properly designing structures that will represent good floodplain management concepts and can be permitted by the State. There comes the rub. FEMA's Public Assistance Program for disaster aid is generally designed to pay for repair of damage to structures and not for costs associated with mandatory upgrading of a structure beyond the damaged elements. The State views this differently; why pay to replace something that just washed out with a similar size that is likely to fail again. There is a 50% guideline rule that the FEMA applies to evaluate the eligibility of a structure for replacement funding. However, even that guideline may not allow for greater funds to be available from the FEMA Public Assistance Program.

Fortunately, there are some FEMA flood mitigation monies available to local communities that are being used to upgrade some of the structures. Otherwise local governments, with stressed budgets, can find themselves without the funds for properly designed structure replacements and repairs necessary for final regulatory approval and ultimate construction and reopening of closed roads.

The Upper Peninsula flood of 2002 was an eye-opener. While assistance from the FEMA is greatly appreciated by the communities, having a disaster declaration does not necessarily mean a quick fix. It's been a long struggle for communities to get back to where they were before the flood. In the end, when one considers the tremendous cost of the damages and the subsequent costs, time, and effort expended for planning, designing, and permitting of new structures, one quickly realizes that good prior planning, proper floodplain management, properly designed structures, and respect for the power of water and the value of floodplains will pay the most dividends in the long run.

In an effort to consider cost savings, we are looking at the concept of limiting the number of hard copy mailings of the newsletter and relying more upon electronic distribution and availability. Your input is requested. Please notify me as to whether you would prefer to continue to receive a hard copy mailing of the newsletter, or if access to it via electronic distribution would be acceptable. Send your comments to my e-mail address of thomasl@michigan.com, or mail them to Les Thomas, MDEQ-GLMD, PO Box 30458, Lansing, MI 48909.

NFIP-Community Rating System (CRS)
(Les Thomas, Geological and Land Management Division, Michigan Department of Environmental Quality)

This past year, two Michigan communities participating in the National Flood Insurance Program (NFIP) have gone above and beyond the basic National Flood Insurance Program standards for flood management. Their efforts have resulted in the granting of revised flood insurance class ratings, and their citizens will benefit from lower flood insurance rates. They were the **City of Midland**, with a revised rate class of 6 from a prior rating of 9. The other community was the **City of Gibraltar**, with a revised rate class of 8 from a prior rating of 9, also. Five other communities have also recently started on their journey of going above and beyond the minimum NFIP criteria for improved floodplain management to improve their flood insurance class rating. They include the **City of Taylor, Park Township, Commerce Township, Taymouth Township, and Fraser Township**, and will be given official Community Rating System (CRS) community status with class ratings of 9 on May 1, 2003.

The CRS rate class categories range from 10 to 1, with each lower class rating resulting in a reduction of flood insurance premiums for all applicable citizens of the community. The CRS program is a voluntary program where all NFIP participating communities start out with a rate class of 10 with no discount in insurance premiums. The premium reductions begin at a rating of 9 with a 5% reduction and are subsequently increased by an additional 5% for each rate class level change from 9 to 1. A community obtaining a rate class of 1 would realize a 45% reduction for its citizens in their flood insurance premiums.

Other Michigan communities that have made progress in improving their flood management programs to realize effective insurance premium rate reductions include:

Bedford Township, class 8
Dearborn Heights, class 9
Hamburg Township, class 8
Luna Pier, class 8
Novi, class 7
Portage, class 8
Sterling Heights, class 8
Sumpter Township, class 8

Across the United States, recent CRS data shows that 978 communities are actively participating in the CRS program with several new communities currently working through the application process to receive reduced ratings. Of the total number of participating communities, about 93% have ratings of 9 to 7, with the remaining 7% having achieved ratings of 6 and lower.

The following description of the National Flood Insurance Program's Community Rating System was taken from the FEMA web page of www.app1.fema.gov/nfip/crs.htm. For more details and further information, check into this web site.

"The National Flood Insurance Program's (NFIP) Community Rating System (CRS) was implemented in 1990 as a program for recognizing and encouraging community floodplain management activities that exceed the minimum NFIP standards. The National Flood Insurance Reform Act of 1994 codified the Community Rating System in the NFIP. Under the CRS, flood insurance premium rates are adjusted to reflect the reduced flood risk resulting from community activities that meet the three goals of the CRS: 1) reduce flood losses; 2) facilitate accurate insurance rating; and 3) promote the awareness of flood insurance.

There are ten CRS classes: Class 1 requires the most credit points and gives the largest premium reduction; Class 10 receives no premium reduction. The CRS recognizes 18 creditable activities, organized under four categories numbered 300 through 600: Public Information, Mapping and Regulations, Flood Damage Reduction, and Flood Preparedness."

If your community is interested in learning more about this win/win opportunity, please feel free to contact me at 517-335-3448 or e-mail of thomasl@michigan.gov, or by contacting Mr. Mike Knox, Senior Field Representative/ CRS Specialist, at 217-787-0584 or e-mail of mknox@iso.com.

Nations' Floodplain Managers Meet in St. Louis

The Michigan Department of Environmental Quality (MDEQ) floodplain management staff was among the nation's flood protection experts at the 27th annual conference of the Association of State Floodplain Managers in St. Louis, Missouri, May 11-16, 2003, at the Adam's Mark Hotel. The Association of State Floodplain Managers (ASFPM) represents 6,000 floodplain management practitioners, including the leading experts in flood hazard management throughout the U.S. and beyond. Nearly every state in the U.S. was represented, as well as a number of internationals.

This year's theme "Lessons Learned: Gateway to Flood Mitigation", inspired over 900 government and private professionals with techniques to mitigate against the effects of flooding before floodwaters rise, the surest and most effective option for reducing the effects of future flooding. This premiere flood management training event in the country drew floodplain managers and planners at all levels of government, as well as engineers, consultants, researchers, insurance, and nonprofit organization experts involved in floodplain mapping, mitigation, response and recovery, and related disciplines. Important discussions this year included reflections on the Great Midwest Flood of '93 and how the recovery process from these floods has had a major influence on national flood programs and policies over the past decade.

ASFPM Chair George Riedel, Missouri, noted that annual flood damages in the nation continue to increase, despite billions of dollars spent on flood control projects and numerous advances in nonstructural floodplain management. ASFPM believes flood damages are increasing unnecessarily; thus, we continue to advance the No Adverse Impact strategy for floodplain management. The No Adverse Impact approach (NAI), introduced in June 2000, is premised on balancing structural and nonstructural flooding solutions in a manner that will not cause additional flood damage on other properties. ASFPM's NAI Community Status Report (available on the Association's website) outlines how communities can implement No Adverse Impact approaches and details how some communities have incorporated NAI approaches that support sustainable community initiatives to reduce the devastation caused by natural disasters.

A key activity at the ASFPM annual conference was to recognize national excellence in flood hazard management; there were ten award categories at state, local, and individual levels. Check the ASFPM website, as below, for those recipients.

The ASFPM website at www.floods.org contains more information about the conference, awards, NAI, and ASFPM.

Web Site References	
Michigan Department of Environmental Quality (MDEQ)Floodplain Management Program, www.michigan.gov/deq select **Water** and then select **Water Management** and then choose the specific area(s) your interested in.	FEMA, National Flood Insurance Program (NFIP), www.fema.gov/fima/nfip.shtm
Michigan State Police (MSP), Emergency Management Division (EMD), www.michigan.gov/msp select **Services to Governmental Agencies** and then select **Emergency Management Division**	National Association of State Floodplain Managers (ASFPM), www.floods.org
Michigan Stormwater-Floodplain Association, (MSFA) www.mifloods.org	Federal Emergency Management Agency (FEMA), www.fema.gov

Question/Answer Section

In an effort to provide service to and meet specific needs of floodplain managers and other citizens involved or impacted by floodplain management programs, we are initiating a question/answer segment as a regular item of the newsletter. Staff will select questions, received on a regular basis from the public and from other staff, that they feel may be of interest and value to others. Readers are encouraged to send in questions relative to issues involving floodplain management and the National Floodplain Insurance Program. Staff will review all submitted questions and select those that they believe are applicable to the intent of the newsletter and that can be efficiently researched and clearly answered.

Questions can be e-mailed to thomasl@michigan.gov or sent to Les Thomas, Michigan Department of Environmental Quality, Geological and Land Management Division, PO Box 30458, Lansing, MI 48909-7958.

Q: Situation--A commercial building is approved for construction within a mapped FEMA floodplain. The building will be elevated above the floodplain. The grades on one side will be elevated above BFE. Will the permittee be required to apply for a LOMR-F?

A: If they fill in a mapped portion of the floodplain so the ground elevation is above the BFE on all four sides, then they should obtain a LOMR-F. If they fill so that the ground elevation is below the BFE on even one side, then they will not be able to obtain a LOMR-F. If they do not fill so that the ground elevation is above the BFE on all four sides then the structure will need to be floodproofed. There may then be insurance ramifications if they choose to floodproof rather than elevate the structure. The insurance rates remain the same with floodproofing one foot above the flood elevation.

Q: Under the state building code, are commercial buildings required to be elevated one foot above BFE?

A: Nonresidential structures including commercial buildings must be elevated or floodproofed to one foot above BFE. Critical structures (described as a type III & IV category structure on page III-2 of the "Floodplain Management for Local Officials 2002 Guidebook") must be elevated or floodproofed to one foot above the 500 year elevation. The guidebook can be found at www.michigan.gov/deq, click on water, water management and then floodplain management.

Q: What are the requirements for a hotel in the floodplain? Is it treated like a residential or commercial and what is required for elevation?

A: Pursuant to the Michigan Building Code, hotels would be considered non residential structures and therefore could be elevated or flood proofed to one foot above the design flood elevation (100 year). Under Part 31, the DEQ would consider a hotel to be a habitable structure and therefore it could not be constructed within the floodway portion of the floodplain. The Michigan Residential Code applies to detached one and two family dwelling and multiple single family dwelling (i.e townhouses) not more than three stories high with a separate means of egress (page III-1 of the Floodplain Management for Local Officials 2002 guidebook).

Q: Does a building inspector have to enforce the elevation requirements found in the Michigan Residential Code (section R 327) and the Michigan Building Code (section 1612) in areas that have not been officially mapped as being floodplain, but, are clearly within or generally understood to be within floodplain?

A: All rivers, streams and drains have a floodplain even if they have not been officially mapped. Part 31 requires a permit from the DEQ to be obtained for work in the floodplain of a river, stream or drain with a drainage area of two square miles or more regardless of whether the floodplain has been mapped. The building code does not allow for the issuance of a building permit if it would result in a violation of other state laws. Therefore, the building officials should enforce the elevation requirements of the state building code. This can be done by requiring a DEQ permit within a suspected floodplain (mapped or un-mapped) of a stream, river or drain with a drainage area of two square miles or more.

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